

Title (en)

AN AMPLIFYING SYSTEM FOR AMPLIFYING A COMMUNICATION SIGNAL

Title (de)

VERSTÄRKUNGSSYSTEM ZUR VERSTÄRKUNG EINES KOMMUNIKATIONSSIGNALS

Title (fr)

SYSTÈME D'AMPLIFICATION PERMETTANT D'AMPLIFIER UN SIGNAL DE COMMUNICATION

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Application

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Abstract (en)

[origin: WO2016086974A1] The invention relates to an amplifying system (100) for amplifying a communication signal, the amplifying system (100) comprising a processor (101) being configured to compare magnitudes of the communication signal with a predetermined threshold, and to decompose the communication signal into a lower portion communication signal and an upper portion communication signal upon the basis of the predetermined threshold, wherein the lower portion communication signal indicates magnitudes of the communication signal below the predetermined threshold, and wherein the upper portion communication signal indicates magnitudes of the communication signal above the predetermined threshold, wherein the processor (101) is further configured to decompose the lower portion communication signal into a first lower portion communication sub-signal and a second lower portion communication sub-signal, the first lower portion communication sub-signal and the second lower portion communication sub-signal respectively having constant magnitudes, a primary amplifier (103) being configured to amplify a first amplifier signal derived from the first lower portion communication sub-signal to obtain a first amplified lower portion communication sub-signal, a secondary amplifier (105) being configured to amplify a second amplifier signal derived from the second lower portion communication sub-signal to obtain a second amplified lower portion communication sub-signal, an auxiliary amplifier (107) being configured to amplify a third amplifier signal derived from the upper portion communication signal to obtain an amplified upper portion communication signal, and a combiner (109) being configured to combine the first amplified lower portion communication sub-signal with the second amplified lower portion communication sub-signal to obtain an amplified lower portion communication signal, and to combine the amplified lower portion communication signal with the amplified upper portion communication signal to obtain an amplified communication signal.

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